C-1 Road Inspection (continued)

4.7. Next on your inspection form you will find it asks you if geotextile fabric has been installed. Typically geotextile fabric is required; however, some soil types do not require it. You will need to check your specifications to determine whether this is needed or not. If it is required, ensure it has been installed properly and circle "Yes".

Figure 4.2: Installing Geotextile Fabric

4.8. The next line item will ask if the compaction reports have passed specification requirements. For the road base material to pass inspection, you will need to get the compaction reports from your third party tester on-site, and the results must meet or exceed the specifications. A good practice is to track where the road base has passed compaction requirements on a map so you're not missing any reports when it comes to submitting them to the owners.

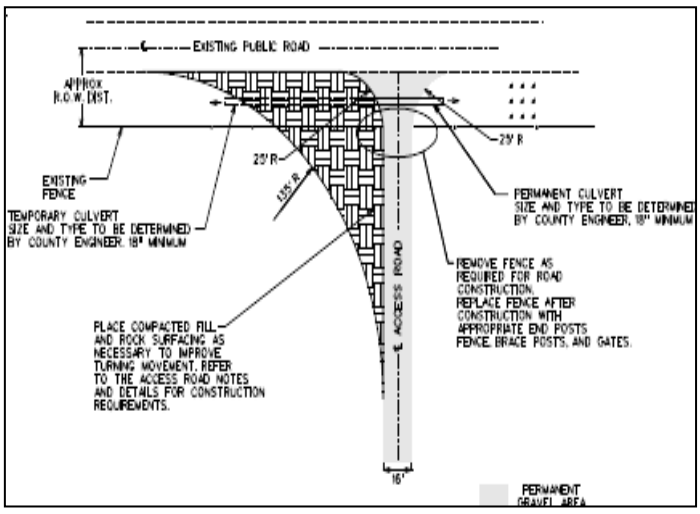

Figure 4.3: Typical Access Road Entrance Detail

Figure 4.4: Compacting Road Base

Figure 4.5: Performing QC Check on Gravel Installation

4.9. The next line item will ask if the road radius for access points and curves has been installed per specifications. Usually the road radius is determined by the turbine manufacturer and transportation company. If inspection passes, circle "Yes" and move onto the next question.

4.10. The next step is to check your road width. Do so by placing two metal pins on each side of the road and measuring the distance between the two points. If there is a PE available to assist with the inspection, they can hold the other end of the tape instead of using the pins. This should be completed before the road shoulders have been pulled up. Once the shoulders have been pulled up, it will be hard to determine where the exact edge of the road is.

C-1 Road Inspection (continued)

4.11. Over the duration of the project, the thickness of the road will change from traffic and maintenance. So your QA/QC for the thickness of the roads should be complete when the final grading of the road has been done. However, you should spot check the depth of the roads during construction, as well, to avoid any major repair areas toward the end of the project. Try catching the problem areas while the crew is there placing the material, they are a lot more willing to do the work while they are in the area.

4.12. To complete the depth check, you will need your pick axe, tape measure, and wood lathe. Pick a hole in a random spot of the road (don't always do the center or edge of the road) until you reach the sub-grade. Once you have reached the sub-grade, measure from the top of the sub-grade to the top of the base material. This will give you the depth of the road. If this is within the tolerance of your design, it is acceptable. If not, you will need to get the contractor back and spot dump some material in the troublesome areas.

4.13. To measure crown height, take two bricks and a string line tied between the two. The distance between the bricks should be the width of the road. Use a tape measure to measure the distance from the string at the center and both edges. The distance at the edge minus the distance at the center should equal your crown height.

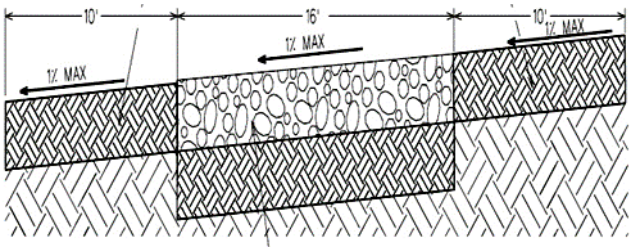

Figure 4.6:Typical Road Placement Cross Section

4.14. In some cases, the engineer may not require a crown to the road design. Instead they may design the road with a slope to maintain an existing drainage pattern (usually 1% to 2% max slope). You will need to adjust your inspection form accordingly.

4.15. Next you will need to check the actual grade of the road sections. The maximum grade should be per the engineer design and specifications. It is a good idea to double check with the crane manuals, as well, to make sure all ends are covered. If at all possible, check this before any base material is placed. If it is not within specifications, the contractor will be able to work with the sub-grade a lot easier and cheaper than the base material. To complete the test, place your digital level on the road. The longer your level is, the more accurate your results will be. So if you have a small level, it is a good idea to place a piece of angle iron, or something that will stay true over the duration of the project, under your level. If your results come under your maximum allowable grade percentage, then the road is acceptable.

4.16. To check for dips and bumps, you can complete this task two ways. 1) Use a 100' tape measure and survey equipment or 2) take two bricks and a string line tied between the two. The distance between the bricks should be about 50'. Use a tape measure to measure the distance from the string to the road in high and low spots. If this distance is greater than the required dip or swale, it fails. Remember to subtract or add the height of the brick. It is important that you complete this inspection prior to any turbine component deliveries. If either of these are out of tolerance, the delivery trucks may get hung up and cause damage to their trucks.

4.17. In the comment section, record any notes that you feel add value to this inspection.

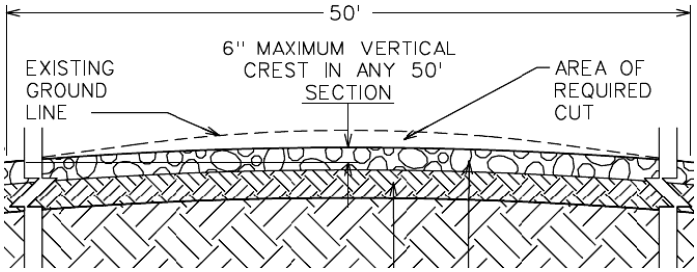

Figure 4.7:Typical Road Profile Crossing Existing Crest Area

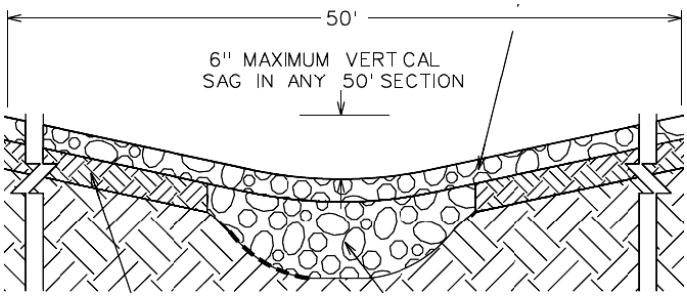

Figure 4.8:Typical Road Profile Crossing Existing Swale Area

C-1 Road Inspection (continued)

5.0 Approval

5.1. Non-conformance notices (NCN) are written when there is an issue with some aspect of the road that cannot be fixed in a quick manner, e.g. that same day. If all NCNs have been closed, circle "Yes". If there is an open NCN issue, you will need to verify that it is closed.

5.2. A photographic record is not required for each road section inspection. However, photos should be taken of the installation process and final product for documentation purposes.

5.3. Depending on the dynamics of your project, there may be a few road modifications during construction. This may be due to landowner issues, wet land issues, or other. Ensure all road changes have been approved by the civil superintendent and all applicable parties (owner, landowner and civil engineer). The civil drawings shall be updated and redlined with all road changes.

5.4. If all the items on this inspection form have been recorded and accepted, and all items are within the specified tolerances of the design drawings, the road is acceptable. Have the installation foreman, as well as yourself, sign the bottom of the form. The road inspection form will then be filed in its appropriate quality control book.

6.0. Records

6.1. C-1 Road Inspection Form

6.2. Photographic records of the road installation

6.3. Third Party Subgrade Compaction Test Results

6.4. Third Party Base Compaction Test Results

6.5. Update Civil Drawings with all road changes, if applicable